Patent Application of Arthur E. Alacar for "Printer Driver Plug-in Module Management System"

Claims: What is claimed is:

1. A method for augmenting a printer driver, comprising: providing a GUI for selecting at least one plug-in module; and dynamically adding the at least one plug-in module to the printer driver.

2. The method of claim 1, wherein the adding of the at least one plug-in module comprises copying at least one plug-in DLL file to a printer system folder.

3. The method of claim 1, wherein the adding of the at least one plug-in module comprises checking compatibility of at least one plug-in DLL file with the printer driver.

4. The method of claim 1, wherein the adding of the at least one plug-in module comprises the at least one plug-in module installing itself.

5. The method of claim 1, wherein the adding of the at least one plug-in module comprises adding at least one registry entry.

6. The method of claim 1, wherein the adding of the at least one plug-in module comprises heap-allocating and initializing at least one private devmode structure.

7. The method of claim 6, wherein the heap is a private devmode area following a public devmode area.

8. The method of claim 7, wherein the heap is fixed size.

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- 9. The method of claim 6, wherein each of the at least one private devmode structure corresponds to each of the at least one plug-in module added, each of which implements an optional feature selected from the group consisting of feature sets, Page Description Languages (PDLs), and Renders.
- 10. The method of claim 1, further comprising: providing a GUI by which a user selects at least one plug-in module; and removing the at least one plug-in module from the printer driver.
- 11. The method of claim 10 wherein the removing of the at least one plug-in module comprises deallocating at least one private devmode structure.
- 12. The method of claim 1, wherein the at least one plug-in module is stored at a remote storage on the network.
- 13. The method of claim 1, wherein the adding of the at least one plug-in module comprises checking at least one registry entry for at least one added plug-in module; and copying at least one DLL file corresponding to the added at least one plug-in module from a server to a client.
- 14. The method of claim 1, wherein the adding of the at least one plug-in module comprises adding at least one GUI tab for the added at least one plug-in module.
- 15. A computer program product for augmenting a printer driver, comprising machine-readable program code for causing a machine to perform the method steps of: providing a GUI for selecting at least one plug-in module; and dynamically adding the at least one plug-in module to the printer driver

- 16. The computer program product of claim 15, wherein the dynamically adding of the at least one plug-in module comprises copying at least one plug-in DLL file to a printer system folder; checking compatibility of the at least one plug-in DLL file with the printer driver; and adding at least one registry entry.
- 17. The computer program product of claim 15, wherein the dynamically adding of the at least one plug-in module comprises heap-allocating and initializing at least one private devmode structure.
- 18. The computer program product of claim 15, wherein the at least one plug-in module is stored at a remote storage on the network.
- 19. A printing system, comprising: a print engine; and a printer driver programmed to augment the printer driver by performing the steps of providing a GUI for selecting at least one plug-in module; and dynamically adding the at least one plug-in module to the printer driver.
- 20. The printing system of claim 19, wherein the adding of the at least one plug-in module comprises copying at least one plug-in DLL file to a printer system folder; checking compatibility of the at least one plug-in DLL file with the printer driver; and adding at least one registry entry.
- 21. The printing system of claim 19, wherein the adding of the at least one plug-in module comprises heap-allocating and initializing at least one private devenode structure.
- 22. The printing system of claim 19, wherein the at least one plug-in module is stored at a remote storage on the network.